

## WHAT IS CLAIMED IS:

Sub B' 7

1 1. A method for global sign-on (GSO) comprising the steps of:  
2 receiving a user login;  
3 determining an existence of a first directory entry corresponding to said user in  
4 response to a first Lightweight Directory Access Protocol (LDAP) message; and  
5 logging said user into one or more data processing services in response to one or  
6 more corresponding second directory entries, and wherein each of said first and second  
7 directory entries represents a data structure in accordance with a corresponding first and  
8 second predetermined LDAP schema object.

1 2. The method of claim 1 wherein each of said corresponding second predetermined  
2 LDAP schema objects has one or more predetermined attributes, each of said one or  
3 more attributes having a set of one or more values, and wherein a first one of said  
4 plurality of attributes is operable for initiating a corresponding one of said data  
5 processing services.

1 3. The method of claim 2 wherein said step of logging said user into one or more  
2 data processing systems is in response to first one of said plurality of attributes having  
3 a first predetermined data value.

1 4. The method of claim 1 wherein said step of logging said user into said one or  
2 more data processing services comprises the steps of:

Sub B' 7

1 for each data processing service, reading a user identifier (UID) and a password  
2 from a corresponding one of said second directory entries; and  
3 logging in said user using said UID and said password.

1 5. The method of claim 1 further comprising the step of starting said one or more  
2 data processing services in response to one or more third directory entries, each of said  
3 third directory entries representing a data structure in accordance with a corresponding  
4 third predetermined LDAP schema object.

1 6. The method of claim 5 further comprising the step of invoking an initialization  
2 routine corresponding to each of said data processing services, wherein each of said  
3 corresponding third predetermined LDAP schema objects includes a set of one or more  
4 attributes, and wherein said initialization routine is determined in response to a value of  
5 a first attribute of said set of one or more attributes.

1 7. The method of claim 1 wherein said step of logging said user into one or more  
2 data processing services includes the step of determining if a first one of said data  
3 processing services requires a prerequisite service.

1 8. The method of claim 7 wherein each of said corresponding second predetermined  
2 LDAP schema objects has one or more predetermined attributes, each of said one or  
3 more attributes having a set of one or more values, and wherein determining if said first  
4 one of said data processing services requires a prerequisite service is in response to a  
5 preselected value of a first one of said one or more attributes.

Sub B' 7

1 9. The method of claim 1 wherein said step of logging said user into one or more  
2 data processing services includes the step of determining if a first one of said data  
3 processing services takes an identifier value.

1 10. The method of claim 9 wherein determining if a first one of said data processing  
2 services takes an identifier value is in response to a fourth directory entry, said fourth  
3 directory entry representing a data structure in accordance with a corresponding fourth  
4 predetermined LDAP schema object.

1 11. The method of claim 10 wherein said fourth predetermined LDAP schema object  
2 has one or more predetermined attributes, each of said one or more attributes having a  
3 set of one or more values, and wherein determining if said first one of said data  
4 processing services takes an identifier value is in response to a preselected value of a first  
5 one of said one or more attributes.

1 12. The method of claim 11 further comprising the step of invoking an initialization  
2 routine corresponding to said first data processing service in response to an attribute  
3 value in a third directory entry corresponding to said first data processing service, said  
4 third directory entry representing a data structure in accordance with a corresponding  
5 third predetermined LDAP schema object, said initialization routine being determined  
6 in response to said attribute value, and wherein said identifier value is passed to said  
7 initialization routine.



Sub B<sup>1</sup> 7

3 15. A computer program product embodied in a tangible storage medium, the  
4 program product including programming for global sign-on (GSO), the programming  
5 comprising instructions for performing the steps of:

6 receiving a user login;

7 determining an existence of a first directory entry corresponding to said user in  
8 response to a first Lightweight Directory Access Protocol (LDAP) message; and

9 logging said user into one or more data processing services in response to one or  
10 more second directory entries, and wherein each of said first and second directory entries  
11 represents a data structure in accordance with a corresponding first and second  
12 predetermined LDAP schema object.

1 16. The computer program product of claim 15 wherein each of said corresponding  
2 second predetermined LDAP schema objects has one or more predetermined attributes,  
3 each of said one or more attributes having a set of one or more values, and wherein a first  
4 one of said plurality of attributes is operable for initiating a corresponding one of said  
5 data processing services.

1 17. The computer program product of claim 16 wherein said step of logging said user  
2 into one or more data processing systems is in response to first one of said plurality of  
3 attributes having a first predetermined data value.

1 18. The computer program product of claim 15 wherein said step of logging said user  
2 into said one or more data processing services comprises the steps of:

Sub B' 7

3 for each data processing service, reading a user identifier (UID) and a password  
4 from a corresponding one of said second directory entries; and  
5 logging in said user using said UID and said password.

1 19. The computer program product of claim 15 further comprising the step of starting  
2 said one or more data processing services in response to one or more third directory  
3 entries, each of said third directory entries representing a data structure in accordance  
4 with a corresponding third predetermined LDAP schema object.

1 20. The computer program product of claim 19 further comprising the step of  
2 invoking an initialization routine corresponding to each of said data processing services,  
3 wherein each of said corresponding third predetermined LDAP schema objects includes  
4 a set of one or more attributes, and wherein said initialization routine is determined in  
5 response to a value of a first attribute of said set of one or more attributes.  
6

1 21. The computer program product of claim 15 wherein said step of logging said user  
2 into one or more data processing services includes the step of determining if a first one  
3 of said data processing services requires a prerequisite service.

1 22. The computer program product of claim 21 wherein each of said corresponding  
2 second predetermined LDAP schema objects has one or more predetermined attributes,  
3 each of said one or more attributes having a set of one or more values, and wherein

Sub B' 7

4 determining if said first one of said data processing services requires a prerequisite  
5 service is in response to a preselected value of a first one of said one or more attributes.

1 23. The computer program product of claim 15 wherein said step of logging said user  
2 into one or more data processing services includes the step of determining if a first one  
3 of said data processing services takes an identifier value.

1 24. The computer program product of claim 23 wherein determining if a first one of  
2 said data processing services takes an identifier value is in response to a fourth directory  
3 entry, said fourth directory entry representing a data structure in accordance with a  
4 corresponding fourth predetermined LDAP schema object.

1 25. The computer program product of claim 24 wherein said fourth predetermined  
2 LDAP schema object has one or more predetermined attributes, each of said one or more  
3 attributes having a set of one or more values, and wherein determining if said first one of  
4 said data processing services takes an identifier value is in response to a preselected value  
5 of a first one of said one or more attributes.

1 26. The computer program product of claim 25 further comprising the step of invoking  
2 an initialization routine corresponding to said first data processing service in response to  
3 an attribute value in a third directory entry corresponding to said first data processing  
4 service, said third directory entry representing a data structure in accordance with a  
5 corresponding third predetermined LDAP schema object, said initialization routine being

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Sub B' 7

6 determined in response to said attribute value, and wherein said identifier value is passed  
7 to said initialization routine.

1 27. The computer program product of claim 23 wherein said identifier value is a  
2 required identifier value.

1 28. The computer program product of claim 23 wherein said identifier value is an  
2 optional identifier value.

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sub B<sup>1</sup> 7

1 29. A data processing system for global sign-on (GSO) comprising:  
2 circuitry operable for receiving a user login;  
3 circuitry operable for determining an existence of a first directory entry  
4 corresponding to said user in response to a first Lightweight Directory Access Protocol  
5 (LDAP) message; and  
6 circuitry operable for logging said user into one or more data processing services  
7 in response to one or more second directory entries, and wherein each of said first and  
8 second directory entries represents a data structure in accordance with a corresponding  
9 first and second predetermined LDAP schema object.

1 30. The data processing system of claim 29 wherein each of said corresponding  
2 second predetermined LDAP schema objects has one or more predetermined attributes,  
3 each of said one or more attributes having a set of one or more values, and wherein a first  
4 one of said plurality of attributes is operable for initiating a corresponding one of said data  
5 processing services.

1 31. The data processing system of claim 30 wherein said circuitry operable for logging  
2 said user into one or more data processing systems is operable in response to first one of  
3 said plurality of attributes having a first predetermined data value.

1 32. The data processing system of claim 29 wherein said circuitry operable for logging  
2 said user into said one or more data processing services comprises:  
3 circuitry operable for, for each data processing service, reading a user identifier  
4 (UID) and a password from a corresponding one of said second directory entries; and

Sub B' 7

5 circuitry operable for logging in said user using said UID and said password.

1 33. The data processing system of claim 29 further comprising circuitry operable for  
2 starting said one or more data processing services in response to one or more third  
3 directory entries, each of said third directory entries representing a data structure in  
4 accordance with a corresponding third predetermined LDAP schema object.

1 34. The data processing system of claim 33 further comprising circuitry operable for  
2 invoking an initialization routine corresponding to each of said data processing services,  
3 wherein each of said corresponding third predetermined LDAP schema objects includes  
4 a set of one or more attributes, and wherein said initialization routine is determined in  
5 response to a value of a first attribute of said set of one or more attributes.

1 35. The data processing system of claim 29 wherein said circuitry operable for logging  
2 said user into one or more data processing services includes circuitry operable for  
3 determining if a first one of said data processing services requires a prerequisite service.  
4

1 36. The data processing system of claim 35 wherein each of said corresponding  
2 second predetermined LDAP schema objects has one or more predetermined attributes,  
3 each of said one or more attributes having a set of one or more values, and wherein  
4 determining if said first one of said data processing services requires a prerequisite service  
5 is in response to a preselected value of a first one of said one or more attributes.

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Sub B' 7

1 37. The data processing system of claim 29 wherein said circuitry operable for logging  
2 said user into one or more data processing services includes circuitry operable for  
3 determining if a first one of said data processing services takes an identifier value.

1 38. The data processing system of claim 37 wherein said circuitry operable for  
2 determining if a first one of said data processing services takes an identifier value is  
3 operable in response to a fourth directory entry, said fourth directory entry representing  
4 a data structure in accordance with a corresponding fourth predetermined LDAP schema  
5 object.

1 39. The data processing system of claim 38 wherein said fourth predetermined LDAP  
2 schema object has one or more predetermined attributes, each of said one or more  
3 attributes having a set of one or more values, and wherein determining if said first one of  
4 said data processing services takes an identifier value is in response to a preselected value  
5 of a first one of said one or more attributes.

1 40. The data processing system of claim 39 further comprising circuitry operable for  
2 invoking an initialization routine corresponding to said first data processing service in  
3 response to an attribute value in a third directory entry corresponding to said first data  
4 processing service, said third directory entry representing a data structure in accordance  
5 with a corresponding third predetermined LDAP schema object, said initialization routine  
6 being determined in response to said attribute value, and wherein said identifier value is  
7 passed to said initialization routine.

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Sub B' 7

1 41. The data processing system of claim 37 wherein said identifier value is a required  
2 identifier value.

1 42. The data processing system of claim 37 wherein said identifier value is an optional  
2 identifier value.

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